REMARKS/ARGUMENTS

The present Amendment is in response to the Office Action having a mailing date of June 15, 2005. Claims 1-22 are pending in the present Application. Applicant has amended claims 1, 2, 5, 8, 9, 10, 11, 17, 18, 19, 20, 21, and 22. Applicant has also canceled claims 6-7 and 15-16. Consequently, claims 1-5, 8-14, and 17-22 remain pending in the present Application.

Applicant has amended claims 1, 8, 9, 10, 11, 17, 18, 19, 20, 21, and 22 to recite that the segment is at least one of an ATM cell, an ATM PDU and an IP packet and that the recited first end is a boundary of the ATM cell, the ATM PDU or the IP packet. Support for the amendment can be found in the specification, page 8, lines 3-10; page 9, lines 15-21; and claims 6, 7, 15, and 16. Applicant has also amended claims 1, 2, 5, 8, 9, 10, 19, 20, 21, and 22 to remove alphanumeric designations of steps. Applicant respectfully submits that the scope of claims 1, 2, 5, 8, 9, 10, 19, 20, 21, and 22 is not narrowed by this amendment. Applicant also respectfully submits that no new matter is added.

In the above-identified Office Action, the Examiner rejected claims 1-2, 4-7, 11, 13-16, and 18-19 under 35 U.S.C. § 102 as being anticipated by U. S. Patent No. 6,151,318 (Woodward). The Examiner also rejected claims 3-6 and 12-15 under 35 U.S.C. § 103 as being unpatentable over Woodward as applied to claims 1 in further view of U.S. Patent No. 5,822,321 (Peterson). The Examiner also rejected claims 8-10, 17, and 20-22 under 35 U.S.C. § 103 as being unpatentable over Woodward in view of U.S. Patent Application Publication No. 2003/0030575 (Frachtenberg).

In the above-identified Office Action, the Examiner rejected claims 1-2, 4-7, 11, 13-16, and 18-19 under 35 U.S.C. § 102 as being anticipated by Woodward. In particular, the Examiner cited col. 6, lines 35-41 of Woodward as teaching representing the first end of a segment with a partition compression code word.

Applicant respectfully traverses the Examiner's rejection. Claim 1 recites a method for compressing data for transmission. Claim 1 includes the step of representing a first end of a segment using a partition compression code word. Claim 1 further recites that the segment is at least one of an ATM cell, an ATM PDU and an IP packet and that the first end is a boundary of the ATM cell, the ATM PDU or the IP packet. Claims 8-9 recites a method for compressing data for transmission with an analogous step. Claim 10 recites a method for transmitting data using ATM. Claim 10 recites the step of representing the first end of a with a transparent mode command. Claim 10 also recites that that the segment is at least one of an ATM cell, an ATM PDU and an IP packet and that the first end is a boundary of the ATM cell, the ATM PDU or the IP packet. Claims 11, 17, and 18 recite analogous systems. Claims 19-22 recite analogous computer-readable media.

Using the methods, systems, and computer-readable media recited in claims 1, 8-11, and 17-22, data may be transmitted in packets such that the boundaries of IP packets, ATM PDUs and/or ATM cells are delineated. Consequently, multiple IP packets may be placed in an ATM PDU, more ATM cells may be placed in a particular bit stream, compression may be made more efficient and network performance may be improved. Specification, page 9, lines 17-20, page 12, lines 8-19, and page 13, lines 10-18.

Woodward, in contrast, merely describes placing multiple ATM cells in a larger data packet. In order to delineate ATM cells, Woodward describes utilizing a payload of "exactly" 106 bytes to ensure that the boundaries of the ATM cells occur at system packet boundaries. Woodward, col. 2, lines 62-67. Woodward then describes utilizing a "fragment type" to indicate the number of ATM cells within the system packet. Woodward, col. 3, lines 41-56. Woodward also describes compressing ATM cells and placing multiple ATM cells across system packets. In

such a system Woodward describes using the fragment type to differentiate between how ATM cells are packed in the system packets. Woodward, col. 4, line 59-col. 5, line 3. Woodward further describes the fragment types indicating whether the packet is a start of a multi-fragment set of packets, an intermediate packet in a multi-fragment set of packets, the last of a multi-fragment set of packets, of a single fragment case—a packet that carries no more than two ATM cells. Woodward, col. 5, lines 5-19. Thus, Woodward describes indicating the number of ATM cells in the data packets of Woodward, but does not use code words to delineate boundaries of ATM cells, ATM PDUs, and/or IP packets. Stated differently, Woodward fails to teach or suggest representing a boundary of an ATM cell, an ATM PDU, and/or an IP packet with a code word.

The Examiner's citation of col. 6, lines 35-41 of Woodward as teaching the use code words does not change this conclusion. The cited portion of Woodward describes the particular case where ATM cells happen to contain identical headers and the utility of the compression scheme used by Woodward in this special case. ATM cells only contain identical headers when the ATM cells share a common recipient. Woodward, col. 2, lines 42-50. The happenstance of ATM cells sharing a common header fails to teach or suggest representing a boundary of an IP packet, an ATM cell, and/or an ATM PDU with a code word. Consequently, Woodward still fails to teach or suggest the method, system, and computer-readable media recited in claims 1, 8-11, and 17-22. Accordingly, Applicant respectfully submits that claims 1, 8-11, and 17-22 are allowable over Woodward.

Claims 1, 8-11, and 17-22 are also allowable over Woodward in view of Peterson and/or Frachtenberg to Woodward. The cited portions of Peterson merely describe the benefits of segmenting data transmission into smaller packets. Peterson, col. 1, lines 8-11 and 21-29.

Further, the cited figure of Peterson merely shows that the start of a particular segment corresponds with the start of a particular data packet. The cited portion of Peterson fails to describe using a code word to represent a boundary of an IP packet, an ATM PDU, and/or an ATM cell. Consequently, any combination of Woodward in view of Peterson would also fail to teach such a feature. Stated differently, if the teachings of Peterson were added to those of Woodward, the combination might use smaller data packets, where possible and not contrary to the teachings of Woodward. However, the combination would still fail to teach or suggest representing a boundary of an IP packet, an ATM PDU, and/or an ATM cell with a code word.

The cited portions of Frachtenberg describe a method for compressing data for transmission that utilizes a dictionary. Frachtenberg, Abstract. Applicant has found no mention in the cited portions of Frachtenberg of representing a boundary of an ATM cell, an ATM PDU, and/or an IP packet with a code word. Consequently, any combination of Woodward in view of Peterson and/or Frachtenberg would fail to teach or suggest this feature. Stated differently, if the teachings of Frachtenberg were added to those of Woodward, or Woodward in view of Peterson, the combination might use a dictionary when compressing data. However, the combination would still fail to teach or suggest representing a boundary of an ATM cell, an ATM PDU, and/or an IP packet with a code word. Consequently, Woodward, and Woodward in view of Peterson and/or Frachtenberg still fail to teach or suggest representing a boundary of an ATM cell, an ATM PDU, and/or an IP packet with a code word. Accordingly, Applicant respectfully submits that claims 1, 8-11, and 17-22 are allowable over the cited references.

Claims 2 and 4-7 depend upon independent claim 1. Claims 13-16 depend upon independent claim 11. Consequently, the arguments herein apply with full force to claims 2, 4-7,

and 13-16. Accordingly, Applicant respectfully submits that claims 2, 4-7, and 13-16 are allowable over the cited references.

The Examiner also rejected claims 3-6 and 12-15 under 35 U.S.C. § 103 as being unpatentable over Woodward as applied to claims 1 in further view of Peterson.

Applicant respectfully traverses the Examiner's rejection. Claims 3-6 depend upon independent claim 1. Claims 12-15 depend upon independent claim 11. Consequently, the arguments herein apply with full force to claims 3-6 and 12-15. Accordingly, Applicant respectfully submits that claims 3-6 and 12-15 are allowable over the cited references.

The Examiner also rejected claims 8-10, 17, and 20-22 under 35 U.S.C. § 103 as being unpatentable over Woodward in view of Frachtenberg.

Claims 8-10 recite methods for compressing and transmitting data and for transmitting data. Claims 8-10 also recite representing the first end of a segment of the plurality of segments with a code word. Claims 8-10 further recite that the segment is at least one of an ATM cell, an ATM PDU and an IP packet and that the first end is a boundary of the ATM cell, the ATM PDU or the IP packet. Claim 17 recites a system that includes an analogous recitation. Claims 20-22 recite computer-readable media that contain analogous recitations. Consequently, the arguments herein apply with full force to claims 8-10, 17, and 20-22. Accordingly, Applicant respectfully submits that claims 8-10, 17, and 20-22 are allowable over the cited references.

Applicant's attorney believes that this application is in condition for allowance. Should any unresolved issues remain, Examiner is invited to call Applicant's attorney at the telephone number indicated below.

Respectfully submitted,

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September 15, 2005
Date

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